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Access DB# 100229**SEARCH REQUEST FORM**

Scientific and Technical Information Center

Requester's Full Name: ERICA CADUGAN Examiner #: 77259 Date: 7/31/03  
 Art Unit: 3722 Phone Number 308-6395 Serial Number: 10/071596  
 Mail Box and Bldg/Room Location: CP2 10D 28 Results Format Preferred (circle): PAPER DISK E-MAIL  
*(I think)*

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: \_\_\_\_\_

Inventors (please provide full names): \_\_\_\_\_

Earliest Priority Filing Date: 2/8/02

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Method of machining a composite material.  
 The method steps themselves are known (using a milling cutter to cut a hole in a workpiece by ~~rotating~~ rotating the cutter about both its own axis and an axis that is offset therefrom). See attached ref US 5816755, for example. However, I can't meet claim 2 wherein this method is applied to cut a hole in a "ceramic matrix composite material workpiece".

P 4109/132 501/95.2  
 D23c3-001? 1616.035?

\*\*\*\*\*  
**STAFF USE ONLY**Searcher: Erica CaduganSearcher Phone #: 306-5967Searcher Location: FIC 3600Date Searcher Picked Up: 8/1/03Date Completed: 8/1/03

Searcher Prep &amp; Review Time: \_\_\_\_\_

Clerical Prep Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

**Type of Search**

NA Sequence (#) \_\_\_\_\_

AA Sequence (#) \_\_\_\_\_

Structure (#) \_\_\_\_\_

Bibliographic \_\_\_\_\_

Litigation \_\_\_\_\_

Fulltext \_\_\_\_\_

Patent Family \_\_\_\_\_

Other \_\_\_\_\_

**Vendors and cost where applicable**

STN \_\_\_\_\_

Dialog \_\_\_\_\_

Questel/Orbit \_\_\_\_\_

Dr.Link \_\_\_\_\_

Lexis/Nexis \_\_\_\_\_

Sequence Systems \_\_\_\_\_

WWW/Internet \_\_\_\_\_

Other (specify) \_\_\_\_\_

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# STIC Search Report

## EIC 3600

STIC Database Tracking Number: 100229

TO: Erica Cadugan  
Location: CP2 10D28  
Art Unit: 3722  
Friday, August 01, 2003

Case Serial Number: 10/071596

From: Caryn Wesner-Early  
Location: EIC 3600  
PK5-Suite 804  
Phone: 306-5967

caryn.wesner@uspto.gov

### Search Notes

If a modification or re-focus of this search is needed, please let me know.

Caryn S. Wesner-Early, MSLS  
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EIC 3600, US Patent & Trademark Office  
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Fax: (703) 306-5758  
caryn.wesner@uspto.gov

?show files;ds

File 348:EUROPEAN PATENTS 1978-2003/Jul W03

(c) 2003 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20030731,UT=20030724

(c) 2003 WIPO/Univentio

File 347:JAPIO Oct 1976-2003/Mar(Updated 030703)

(c) 2003 JPO & JAPIO

File 351:Derwent WPI 1963-2003/UD,UM &UP=200348

(c) 2003 Thomson Derwent

File 371:French Patents 1961-2002/BOPI 200209

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Set	Items	Description
S1	1	AU='MEECE R':AU='MEECE R D'
S2	26	AU='BACK J'
S3	0	AU='BACK JEFFREY'
S4	0	AU='TUCHFARBER R'
S5	4	AU='GEVERDT G':AU='GEVERDT GERALD ROGER'
S6	5	AU='BRUNCK M':AU='BRUNCK MICHAEL JAY'
S7	35	S1 OR S2 OR S3 OR S4 OR S5 OR S6
S8	116465	IC=(B23C-001? OR C04B-035?)
S9	0	S7 AND S8
S10	3264248	CUT OR CUTS OR CUTTING OR MACHINING OR MILLING OR PIERC???
		OR CUTOUT OR INCIS???
		OR CARV???
		OR SHAP???
S11	6	S7 AND S10
S12	6	IDPAT (sorted in duplicate/non-duplicate order)
S13	4	IDPAT (primary/non-duplicate records only)

13/3,K/1 (Item 1 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
(c) 2003 Thomson Derwent. All rts. reserv.

014845725 \*\*Image available\*\*  
WPI Acc No: 2002-666431/200271  
XRPX Acc No: N02-527367

Reaming method in metal substrate involves longitudinally advancing  
chamfered end of reamer into hole of substrate at rate of at least 5 mils  
per cutting edge during rotation of reamer

Patent Assignee: BAIRD J A (BAIR-I); GEVERDT G R (GEVE-I); MEECE R D  
(MEECE-I); GENERAL ELECTRIC CO (GENE )

Inventor: BAIRD J A; GEVERDT G R ; MEECE R D  
Number of Countries: 001 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020102141	A1	20020801	US 2001772334	A	20010129	200271 B
US 6547495	B2	20030415	US 2001772334	A	20010129	200329

Priority Applications (No Type Date): US 2001772334 A 20010129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020102141	A1		9	B23B-035/00	
US 6547495	B2			B23B-035/00	

... end of reamer into hole of substrate at rate of at least 5 mils per  
cutting edge during rotation of reamer

...Inventor: GEVERDT G R ...

... MEECE R D

Abstract (Basic):

... of a reamer into the hole at the rate of at least 5 mils per  
cutting edge during rotation of the reamer.

...Title Terms: CUT ;

13/3,K/2 (Item 2 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
(c) 2003 Thomson Derwent. All rts. reserv.

014047386 \*\*Image available\*\*  
WPI Acc No: 2001-531599/200159  
XRPX Acc No: N01-394773

Workpiece machining method in multiaxis numerically controlled machine  
e.g. for compressor rotor blade manufacture, involves shifting workpiece  
based on its offset from nominal configuration

Patent Assignee: GENERAL ELECTRIC CO (GENE )  
Inventor: BRUNCK M J ; EHLING D E; RANDOLPH J E  
Number of Countries: 030 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1129813	A1	20010905	EP 2001301358	A	20010216	200159 B
BR 200100611	A	20011106	BR 2001611	A	20010216	200175
JP 2002006911	A	20020111	JP 200156069	A	20010301	200208
SG 89376	A1	20020618	SG 2001687	A	20010208	200253
US 6453211	B1	20020917	US 2000517020	A	20000302	200264

Priority Applications (No Type Date): US 2000517020 A 20000302

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1129813	A1	E	16	B23P-006/00	

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT  
LI LT LU LV MC MK NL PT RO SE SI TR

BR 200100611 A B23Q-003/00  
JP 2002006911 A 38 G05B-019/18

SG 89376 A1 P-006/00  
US 6453211 B1 G06F-015/00

Workpiece machining method in multiaxis numerically controlled machine  
e.g. for compressor rotor blade manufacture, involves shifting...  
Inventor: BRUNCK M J ...

Abstract (Basic):

... For machining workpiece in multiaxis numerically controlled  
machine e.g. for manufacture of rotor blades or airfoils...  
...Title Terms: MACHINING ;

13/3,K/3 (Item 3 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
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013309364 \*\*Image available\*\*  
WPI Acc No: 2000-481301/200042  
XRAM Acc No: C01-035925  
XRPX Acc No: N01-090565

Surface transmission-type optical switch for use in, e.g. parallel-type  
optical computers, comprises an indium substrate and a Fabry-Perot type  
optical amplifier

Patent Assignee: KOREA ELECTRONICS & TELECOM RES INST (KOEL-N); ELECTRONICS  
& TELECOM RES INST (ELTE-N)

Inventor: BACK J ; LEE B; BAEK J H

Number of Countries: 002 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 99053978	A	19990715	KR 9773709	A	19971224	200042 B
US 6181843	B1	20010130	US 98145512	A	19980902	200114
KR 250475	B1	20000501	KR 9773709	A	19971224	200126

Priority Applications (No Type Date): KR 9773709 A 19971224

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
KR 99053978	A			G02B-026/00	
US 6181843	B1		9	G02B-006/26	
KR 250475	B1			G02F-001/00	

Inventor: BACK J ...

Abstract (Basic):

... layer, and a top superlattice DBR having a rectangular or oval  
mesa surface of different shape and size as compared to circular  
incoming beam.

... and a top superlattice DBR which has a rectangular or oval mesa  
surface of different shape and size as compared with that of the  
circular incoming beam. The signals are reflected...

...matrices of a space division complex. This is done by overlapping  
optical amplifiers of uniform shape serially, using the surface-type  
optical amplification, which can control filter wavelengths...

13/3,K/4 (Item 4 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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01344224

Method for repositioning or repairing holes  
Verfahren zum Repositionieren oder Reparieren von Bohrungen  
Procede pour repositionner ou reparer des trous  
PATENT ASSIGNEE:

GENERAL ELECTRIC COMP (203903), 1 River Road, Schenectady, NY 12345,  
(US), (Applicant designated States: all)

INVENTOR:

Anderson, William Carl, 12094 Greencastle Drive, Springdale, Ohio 45246,  
(US)  
Dunkman, Dewey Duane, 4711 Chalet Drive, Cincinnati, Ohio 45217, (US)  
Geverdt, Gerald Roger, 3266 Braewood Drive, Cincinnati, Ohio 45241,  
(US)  
Stapperfenne, Ronald Dale, 3021 Baron's Cove, Edgewood, Kentucky 41017,  
(US)

LEGAL REPRESENTATIVE:

Goode, Ian Roy et al (31097), GE LONDON PATENT OPERATION, Essex House,  
12/13 Essex Street, London WC2R 3AA, (GB)

PATENT (CC, No, Kind, Date): EP 1147849 A1 011024 (Basic)

APPLICATION (CC, No, Date): EP 2001303611 010420;

PRIORITY (CC, No, Date): US 556182 000421

DESIGNATED STATES: DE; FR; GB; IT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: B23P-006/00; F01D-005/00

ABSTRACT WORD COUNT: 114

NOTE:

Figure number on first page: 5

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200143	1379
SPEC A	(English)	200143	5062
Total word count - document A			6441
Total word count - document B			0
Total word count - documents A + B			6441

INVENTOR:

... US)

Geverdt, Gerald Roger ...

...SPECIFICATION other. Accordingly, as the value of the individual assembly increases, the margin of error in **machining** and joining these components together becomes even more critical.  
In the past, such mislocated, misaligned...

...ends of the plug, such by upper and lower punches 9 and 10 that are **shaped** and positioned to promote uniform heating and deformation of plug 6. While this force is...While the hole that has been enlarged to form enlarged hole 18 has a circular **shape** so as to be cylindrical in configuration, the method of the present invention can also be used to repair or reposition holes having other configurations, including those where the **shape** of the hole is oval, elliptical, rounded rectangular, TV screen **shaped** multiple lobes or the like.  
As also shown in FIG.1, a recess 22 is...

...As shown in FIG. 2, enlarged hole 18 is elongated across one axis, typically by **milling** hole 18, so that hole 18 to form a pair of opposed, typically ear- **shaped** locking portions 26 and 30. These locking portions 26 and 30 extend axially typically from...

...tool head 76, and an anvil or support indicated by 82 with a golf tee **shaped** insert made of a hard material such as tungsten carbide fits within a recess in...encountered during use.

As shown in FIG. 7, a new repositioned hole 88 of circular **shape** and cylindrical configuration is formed in fixed rivet 52. Hole 88 has diameter smaller than...

?show files;ds

File 347:JAPIO Oct 1976-2003/Mar(Updated 030703)

(c) 2003 JPO & JAPIO

File 351:Derwent WPI 1963-2003/UD,UM &UP=200348

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File 371:French Patents 1961-2002/BOPI 200209

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Set	Items	Description
S1	2516273	CUT OR CUTS OR CUTTING OR MACHINING OR MILLING OR PIERC??? OR CUTOUT OR INCIS??? OR CARV??? OR SHAP???
S2	2582094	OPENING? ? OR HOLE? ? OR APERTURE? ? OR ORIFICE? ? OR PERF- ORAT??? OR CIRCLE? ? OR CAVIT???
S3	6343	CERAMIC? ?(3W) (MATRIX OR COMPOSITE)
S4	156216	S1(5N)S2
S5	6	S3(10N)S4
S6	235539	S1(10N)S2
S7	32	S3(S)S6
S8	11	S3(10N)S6
S9	11	IDPAT (sorted in duplicate/non-duplicate order)
S10	11	IDPAT (primary/non-duplicate records only)



10/3,K/1 (Item 1 f file: 351)  
DIALOG(R)File 351:Derwent WPI  
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012779532 \*\*Image available\*\*  
WPI Acc No: 1999-585758/199950  
XRAM Acc No: C99-170809  
XRPX Acc No: N99-433091

Ceramic fibre composite material for combustion liner - forms holes on compound layer, during shaping of fibre on preform

Patent Assignee: TOSHIBA KK (TOKE )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11255567	A	19990921	JP 9856944	A	19980309	199950 B

Priority Applications (No Type Date): JP 9856944 A 19980309

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11255567	A		12	C04B-035/80	

...Abstract (Basic): NOVELTY - The material includes a ceramic matrix and a fibre. Holes are formed on a compound layer, during shaping of fibre on preform...

10/3,K/2 (Item 2 from file: 351)  
DIALOG(R)File 351:Derwent WPI  
(c) 2003 Thomson Derwent. All rts. reserv.

009440993  
WPI Acc No: 1993-134512/199316  
XRAM Acc No: C93-060123

Pulp screening plate mfr. - by machining steplessly widening apertures in bottoms of grooves in plate outer surface to improve flow properties

Patent Assignee: CAE INVESTMENTS BV (CAEI-N); CAE SCREENPLATES OY (CAES-N); AHLSTROEM CORP A (AHLN )

Inventor: AALTONEN F; ALAJAEAESKI T; ALAJAASKI T

Number of Countries: 022 Number of Patents: 010

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9307334	A1	19930415	WO 92FI263	A	19920930	199316 B
FI 9104703	A	19930405	FI 914703	A	19911004	199326
FI 89521	B	19930630	FI 914703	A	19911004	199332
EP 613509	A1	19940907	EP 92920610	A	19920930	199434
			WO 92FI263	A	19920930	
CA 2120250	A	19930415	CA 2120250	A	19920930	199513
JP 7502308	W	19950309	WO 92FI263	A	19920930	199518
			JP 93506640	A	19920930	
EP 613509	B1	19960131	EP 92920610	A	19920930	199609
			WO 92FI263	A	19920930	
DE 69208100	E	19960314	DE 608100	A	19920930	199616
			EP 92920610	A	19920930	
			WO 92FI263	A	19920930	
ES 2085038	T3	19960516	EP 92920610	A	19920930	199627
US 5587077	A	19961224	WO 92FI263	A	19920930	199706
			US 94211403	A	19940718	

Priority Applications (No Type Date): FI 914703 A 19911004

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9307334	A1	E	32	D21D-005/16	

Designated States (National): CA FI JP KP KR NO US

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE

FI 89521 B D21D-005/16 Previous Publ. patent I 9104703  
 EP 613509 A1 E D21D-005/16 Based on patent WO 9307334  
 Designated States (Regional): AT DE ES FR GB IT SE  
 JP 7502308 W 10 D21D-005/16 Based on patent WO 9307334  
 EP 613509 B1 E 20 D21D-005/16 Based on patent WO 9307334  
 Designated States (Regional): AT DE ES FR GB IT SE  
 DE 69208100 E D21D-005/16 Based on patent EP 613509  
 Based on patent WO 9307334  
 ES 2085038 T3 D21D-005/16 Based on patent EP 613509  
 US 5587077 A 15 B01D-039/10 Based on patent WO 9307334  
 FI 9104703 A D21D-005/16  
 CA 2120250 A D21D-005/16

→ teaches  
 fiber  
 glass  
 composite  
 (col 7  
 for ex)

...Abstract (Basic): Pref. the plate material is ceramic, duplex steel, or composite material, and the apertures are formed by waterjet cutting between ribs formed by attachment or machining. Pref. the apertures are slots, and the grooves are flanked by orthogonal and inclined side surfaces...

...Abstract (Equivalent): Pref. the plate material is ceramic, duplex steel, or composite material, and the apertures are formed by waterjet cutting between ribs formed by attachment or machining. Pref. the apertures are slots, and the grooves are flanked by orthogonal and inclined side surfaces...

10/3,K/3 (Item 3 from file: 351)  
 DIALOG(R)File 351:Derwent WPI  
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009271487 \*\*Image available\*\*  
 WPI Acc No: 1992-398899/199248  
 XRAM Acc No: C92-177022  
 XRPX Acc No: N92-304239

Composite bodies contg. amts. of filler which vary with position - formed by allowing filler to at least partially settle while in suspension in a molten metal matrix

Patent Assignee: LANXIDE TECHNOLOGY CO LP (LANX ); LANXIDE TECHNOLOGY CO LTD (LANX )

Inventor: YANG C

Number of Countries: 011 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9219782	A1	19921112	WO 92US3511	A	19920428	199248 B
AU 9219913	A	19921221	AU 9219913	A	19920428	199311
			WO 92US3511	A	19920428	
US 5240672	A	19930831	US 91692748	A	19910429	199336
EP 583379	A1	19940223	EP 92912142	A	19920428	199408
			WO 92US3511	A	19920428	
JP 6509841	W	19941102	JP 92511943	A	19920428	199503
			WO 92US3511	A	19920428	
US 5372777	A	19941213	US 91692748	A	19910429	199504
			US 93113932	A	19930830	
US 5549151	A	19960827	US 91692748	A	19910429	199640
			US 93113932	A	19930830	
			US 94353845	A	19941212	
EP 583379	B1	19970122	EP 92912142	A	19920428	199709
			WO 92US3511	A	19920428	
DE 69217049	E	19970306	DE 617049	A	19920428	199715
			EP 92912142	A	19920428	
			WO 92US3511	A	19920428	

Priority Applications (No Type Date): US 91692748 A 19910429; US 93113932 A 19930830; US 94353845 A 19941212

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 9219782 A1 E 48 C22C-001/10 Based on patent WO 9219782  
 AU 9219913 A C22C-001/10  
 US 5240672 A 20 B22F-001/00  
 EP 583379 A1 E C22C-001/10 Based on patent WO 9219782  
 JP 6509841 W 15 C22C-001/09 Based on patent WO 9219782  
 US 5372777 A 19 B22F-007/08 Cont of application US 91692748  
 Cont of patent US 5240672  
 US 5549151 A 21 B22D-019/14 Cont of application US 91692748  
 Cont of application US 93113932  
 Cont of patent US 5240672  
 Cont of patent US 5372777  
 EP 583379 B1 E 24 C22C-001/10 Based on patent WO 9219782  
 Designated States (Regional): BE CH DE FR GB IT LI LU  
 DE 69217049 E C22C-001/10 Based on patent EP 583379  
 Based on patent WO 9219782

...Abstract (Equivalent): by forming a molten suspension of filler and matrix metal, supplying the suspension of filler and matrix metal, supplying the suspension into a mould cavity, maintaining the suspension within the mould for a time sufficient to permit the filler to at least partially settle and so produce a filler...

10/3,K/4 (Item 4 from file: 351)  
 DIALOG(R)File 351:Derwent WPI  
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008262689 \*\*Image available\*\*  
 WPI Acc No: 1990-149690/199020  
 XRAM Acc No: C90-065533  
 XRPX Acc No: N90-116021

**Metal matrix composite prodn. - by melting matrix metal ingot within filler**

Patent Assignee: LANXIDE TECHNOLOGY CO LP (LANX )

Inventor: URQUHART A W; WHITE D R

Number of Countries: 029 Number of Patents: 023

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 368783	A	19900516	EP 89630166	A	19890928	199020	B
AU 8941641	A	19900517				199026	
PT 92257	A	19900531				199026	
BR 8905616	A	19900605				199027	
CA 2000775	A	19900510				199027	
NO 8903980	A	19900605				199028	
DK 8905583	A	19900511				199030	
FI 8904928	A	19900511				199032	
JP 2241660	A	19900926	JP 89291362	A	19891110	199045	
CN 1042496	A	19900530				199110	
US 5000245	A	19910319	US 88269372	A	19881110	199114	
ZA 8908540	A	19910731	ZA 898540	A	19891109	199135	
RO 105227	A	19921130	RO 142369	A	19891109	199343	
EP 368783	B1	19940119	EP 89630166	A	19890928	199403	
DE 68912523	E	19940303	DE 612523	A	19890928	199410	
			EP 89630166	A	19890928		
IL 91728	A	19940125	IL 91728	A	19890921	199413	
FI 91832	B	19940513	FI 894928	A	19891017	199422	
NO 176185	B	19941107	NO 893980	A	19891005	199444	
PH 26242	A	19920401	PH 39484	A	19891107	199520	
IE 63062	B	19950322	IE 893174	A	19891004	199521	
JP 2905514	B2	19990614	JP 89291362	A	19891110	199929	
KR 121458	B1	19971203	KR 8914470	A	19891010	199951	
CA 2000775	C	20010501	CA 2000775	A	19891013	200131	

Priority Applications (No Type Date): US 88269372 A 19881110  
 Patent Details:

Patent No.	Kind	Lan	Pg	in IPC	Filing Notes
EP 368783	A				
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
RO 105227	A			C04B-035/71	
EP 368783	B1	E	20	C22C-001/09	
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
DE 68912523	E			C22C-001/09	Based on patent EP 368783
IL 91728	A			C04B-035/60	
FI 91832	B			B22D-019/00	Previous Publ. patent FI 8904928
NO 176185	B			C22C-001/09	Previous Publ. patent NO 8903980
PH 26242	A			B22D-019/14	
IE 63062	B			C22C-001/09	
JP 2905514	B2		14	C22C-001/09	Previous Publ. patent JP 2241660
KR 121458	B1			B22F-007/02	
CA 2000775	C	E		B22D-019/14	

...Abstract (Basic): USE/ADVANTAGE - The process is useful for prodn. of aluminium (alloy) matrix composite contg. **ceramic** filler. A **shaped composite** body having a **cavity** of **shape** correspding to the original matrix metal ingot is produced. (20pp Dwg.No.2/4)

10/3,K/5 (Item 5 from file: 351)  
 DIALOG(R)File 351:Derwent WPI  
 (c) 2003 Thomson Derwent. All rts. reserv.

008173055  
 WPI Acc No: 1990-060056/199009  
 XRAM Acc No: C90-026067  
 XRPX Acc No: N90-046162

**Artificial front tooth - with concave cavity and specified geometrical dimensions made of plastic or ceramic**  
 Patent Assignee: GC TOSHI KOGYO KK (GCDE ); G-C TOSHI KOGYO COR (GCTO-N); SHIKA KOGYO G C KK (SHIK-N)  
 Inventor: AI M; HASEGAWA A; IKEDA I; KAGAYA T; NAKAMURA Y; YAMAGATA K  
 Number of Countries: 004 Number of Patents: 004  
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3925324	A	19900222	DE 3925324	A	19890731	199009 B
JP 2049650	A	19900220	JP 88200084	A	19880812	199013
US 4909738	A	19900320	US 89384482	A	19890725	199017
CH 680109	A	19920630	CH 892950	A	19890811	199230

Priority Applications (No Type Date): JP 88200084 A 19880812

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 3925324	A		14		
CH 680109	A			A61C-013/08	

...Abstract (Basic): use of a tooth normally used for full dentures. Instead, it is made of plastic, **ceramic** or of a **composite** material of both, with a concave **cavity** which extends from a basal segment to a lingual **incisory** segment...

10/3,K/6 (Item 6 from file: 351)  
 DIALOG(R)File 351:Derwent WPI  
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007783208  
 WPI Acc No: 1989-048320/198907  
 XRAM Acc No: C89-021206

**Self-supporting ceramic composite body prodn. - by inverse replication of shaped parent metal body**  
 Patent Assignee: LANXIDE TECHNOLOGY CO LP (LANX )

Inventor: DWIVEDI R K  
Number of Countries: 030 Number of Patents: 025  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 303552	A	19890215	EP 88630147	A	19880809	198907	B
BR 8803930	A	19890228				198914	
NO 8803412	A	19890306				198915	
JP 1069548	A	19890315				198917	
AU 8820526	A	19890302				198918	
FI 8803705	A	19890211				198918	
PT 88228	A	19890630				198930	
ZA 8805836	A	19890628	ZA 885836	A	19880809	198931	
DK 8804448	A	19890211				198932	
US 4886766	A	19891212	US 8784550	A	19870810	199007	
CN 1031694	A	19890315				199010	
CS 8805536	A	19911112				199204	
US 5082700	A	19920121	US 89429210	A	19891030	199206	
IL 87311	A	19920216	IL 87311	A	19880802	199220	
DD 300642	A5	19920625	DD 318778	A	19880808	199247	
CS 276740	B	19920812	CS 885536	A	19880809	199304	
EP 303552	B1	19930407	EP 88630147	A	19880809	199314	
RO 102360	A	19911030	RO 134822	A	19880808	199315	
DE 3880045	G	19930513	DE 3880045	A	19880809	199320	
			EP 88630147	A	19880809		
CA 1318490	C	19930601	CA 574256	A	19880809	199327	
HU 63132	T	19930728	HU 884097	A	19880805	199336	
US 5254365	A	19931019	US 8784550	A	19870810	199343	
			US 89429210	A	19891030		
			US 92823727	A	19920121		
US 5382458	A	19950117	US 8784550	A	19870810	199509	
			US 89429210	A	19891030		
			US 92823727	A	19920121		
			US 93138314	A	19931018		
SU 1838280	A3	19930830	SU 4356291	A	19880809	199520	
JP 2642679	B2	19970820	JP 88199753	A	19880810	199738	

Priority Applications (No Type Date): US 8784550 A 19870810; US 89429210 A 19891030; US 92823727 A 19920121; US 93138314 A 19931018

#### Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 303552	A	E	19		
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
US 4886766	A		17		
CS 276740	B				Previous Publ. patent CS 8805536
EP 303552	B1	E	26		
Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE					
DE 3880045	G				Based on patent EP 303552
US 5254365	A		18		Cont of application US 8784550
					Cont of application US 89429210
					Cont of patent US 4886766
					Cont of patent US 5082700
US 5382458	A		17		Cont of application US 8784550
					Cont of application US 89429210
					Cont of application US 92823727
					Cont of patent US 4886766
					Cont of patent US 5082700
					Cont of patent US 5254365
SU 1838280	A3		16		
JP 2642679	B2		13		Previous Publ. patent JP 1069548

...Abstract (Equivalent): Method for producing self-supporting **ceramic composite** body comprises A) pounding **shaped** parent metal body having at least one open **cavity**, B) juxtaposing with at least one bedding of conformable filler material, C) heating embedded shaped...

10/3,K/7 (Item 7 fr file: 351)  
 DIALOG(R)File 351:Derwent WPI  
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007247080

WPI Acc No: 1987-244087/198735

XRAM Acc No: C87-103120

Composite ceramic body having shaped cavity - obt'd. by forming metal core  
 which is embedded in filler and melted in contact with oxidant until  
 totally absorbed as oxide phase of ceramic

Patent Assignee: LANXIDE TECHNOLOGY CO LP (LANX ); LANXIDE TECHNOLOGY CO  
 (LANX )

Inventor: LESHER H D; NEWKIRK M S; URQUHART A W

Number of Countries: 018 Number of Patents: 026

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 234704	A	19870902	EP 87300409	A	19870119	198735 B
AU 8767919	A	19870730				198737
NO 8700312	A	19870824				198739
ZA 8700413	A	19870715	ZA 87413	A	19870120	198740
FI 8700336	A	19870728				198744
JP 62230663	A	19871009	JP 8714308	A	19870126	198746
BR 8700342	A	19871208				198803
DK 8700435	A	19870728				198806
PT 84198	A	19880122				198809
CN 8700269	A	19871021				198845
US 4828785	A	19890509	US 86823542	A	19860127	198922
RO 97668	A	19890830				199018
IL 81191	A	19901105				199103
CS 8700502	A	19910611				199133
US 5051382	A	19910924	US 89329794	A	19890328	199141
EP 234704	B	19911030				199144
DE 3774147	G	19911205				199150
CA 1303336	C	19920616	CA 528275	A	19870127	199230
ES 2028061	T3	19920701	EP 87300409	A	19870119	199231
US 5168081	A	19921201	US 86823542	A	19860127	199251
			US 89329794	A	19890328	
			US 91763681	A	19910923	
US 5275987	A	19940104	US 86823542	A	19860127	199402
			US 89329794	A	19890328	
			US 91763681	A	19910923	
			US 92983191	A	19921130	
SU 1787148	A3	19930107	SU 4028927	A	19870126	199406
NO 175054	B	19940516	NO 87312	A	19870126	199423
US 5494868	A	19960227	US 86823542	A	19860127	199614
			US 89329794	A	19890328	
			US 91763681	A	19910923	
			US 92983191	A	19921130	
			US 94176058	A	19940103	
JP 96032595	B2	19960329	JP 8714308	A	19870126	199618
KR 9504063	B1	19950425	KR 87628	A	19870127	199710

Priority Applications (No Type Date): US 86823542 A 19860127; US 89329794 A  
 19890328; US 91763681 A 19910923; US 92983191 A 19921130; US 94176058 A  
 19940103

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 234704	A	E	39		
US 4828785	A		14		
ES 2028061	T3			C04B-035/65	Based on patent EP 234704
US 5168081	A		13	C04B-035/65	Div ex application US 86823542
					Cont of application US 89329794
					Div ex patent US 4828785
					Cont of patent US 5051382
US 5275987	A		14	C04B-035/10	Div ex application US 86823542

Cont of application 89329794  
 Cont of application US 91763681  
 Div ex patent US 4828785  
 Cont of patent US 5051382  
 Cont of patent US 5168081  
 SU 1787148 A3 9 C04B-035/10  
 NO 175054 B C04B-035/65  
 US 5494868 A 13 C04B-035/65  
 Previous Publ. patent NO 8700312  
 Div ex application US 86823542  
 Cont of application US 89329794  
 Cont of application US 91763681  
 Cont of application US 92983191  
 Div ex patent US 4828785  
 Cont of patent US 5051382  
 Cont of patent US 5168081  
 Cont of patent US 5275987  
 JP 96032595 B2 13 C04B-035/622 Previous Publ. patent JP 62230663  
 CA 1303336 C C04B-035/65  
 KR 9504063 B1 C04B-033/32

...Abstract (Equivalent): A self supporting **ceramic composite** body  
 having a **shaped cavity** within a filler material. The filler  
 material embedded with the polycrystalline matrix is formed by...

10/3,K/8 (Item 8 from file: 351)  
 DIALOG(R)File 351:Derwent WPI  
 (c) 2003 Thomson Derwent. All rts. reserv.

003531632  
 WPI Acc No: 1982-79623E/198238  
**Ceramic burner plate - comprises silica-alumina clay-heat resistant  
 fibrous ceramic composite**

Patent Assignee: MATSUSHITA ELEC IND CO LTD (MATU )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 57129308	A	19820811	JP 8114829	A	19810203	198238 B
JP 89058403	B	19891212				199002

Priority Applications (No Type Date): JP 8114829 A 19810203

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 57129308	A		6		

*note*

...Abstract (Basic): and moulded in moulds having a reversed uneven pattern  
 surface and a large number of **holes piercing** from the back to the  
 surface of the **ceramic composite** plate. The moulding is then baked  
 at 900-1300 deg.C in the air...

10/3,K/9 (Item 9 from file: 347)  
 DIALOG(R)File 347:JAPIO  
 (c) 2003 JPO & JAPIO. All rts. reserv.

07026500  
**METAL-CERAMIC COMPOSITE MATERIAL HAVING TAPPED HOLE, AND ITS PRODUCING  
 METHOD**

PUB. NO.: 2001-254133 [JP 2001254133 A]

PUBLISHED: September 18, 2001 (20010918)

INVENTOR(s): HIGUCHI TAKESHI

ODANO CHOKUSUI

SHIMOJIMA HIROMASA

APPLICANT(s): TAIHEIYO CEMENT CORP

CELANX KK

APPL. NO.: 2000-07243 [JP 200072435]  
FILED: March 10, 2000 (20000310)

ABSTRACT

... tapped hole is composed of Ni-free stainless. In this method of producing a metal- **ceramics composite** material having a tapped **hole**, a preform is formed in which bar- **shaped** or tubular Ni-free stainless steel is buried by ceramics powder as a reinforcing material...

10/3,K/10 (Item 10 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2003 JPO & JAPIO. All rts. reserv.

06116808 \*\*Image available\*\*  
LASER PROCESSING CERAMIC COMPOSITE MATERIAL

PUB. NO.: 11-058343 [JP 11058343 A]  
PUBLISHED: March 02, 1999 (19990302)  
INVENTOR(s): YAMAMOTO TAKAHIRO  
MORIMOTO MASASHI  
SHIKAMA TAKASHI  
APPLICANT(s): MURATA MFG CO LTD  
APPL. NO.: 09-223260 [JP 97223260]  
FILED: August 20, 1997 (19970820)

ABSTRACT

PROBLEM TO BE SOLVED: To obtain a laser processing **ceramic composite** material for accurately, efficiently forming a **hole** or groove of a desired **shape** on a ceramic green sheet.

SOLUTION: The laser processing **ceramic composite** material 11 comprises a resin carrier film 12, a ceramic green sheet 10 supported to...

10/3,K/11 (Item 11 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04461999 \*\*Image available\*\*  
COMPOSITE IMPLANT MEMBER AND PRODUCTION THEREOF

PUB. NO.: 06-105899 [JP 6105899 A]  
PUBLISHED: April 19, 1994 (19940419)  
INVENTOR(s): TAMURA YASUNORI  
AKAI TOMOYUKI  
KOBAYASHI TSUNEYUKI  
APPLICANT(s): KYOCERA CORP [358923] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 04-259921 [JP 92259921]  
FILED: September 29, 1992 (19920929)  
JOURNAL: Section: C, Section No. 1226, Vol. 18, No. 381, Pg. 72, July  
18, 1994 (19940718)

ABSTRACT

...particle size of about 149.mu.m is applied to the inner wall of a **ceramic matrix** 2 forming a cylindrical **shape** having a through **hole** 2a in its central long axis direction and composed of a porous ceramic with a...



?show files;ds

File 8: Ei Compendex(R) 1970-2003/Jul W3  
(c) 2003 Elsevier Eng. Info. Inc.  
File 35: Dissertation Abs Online 1861-2003/Jul  
(c) 2003 ProQuest Info&Learning  
File 65: Inside Conferences 1993-2003/Jul W4  
(c) 2003 BLDSC all rts. reserv.  
File 2: INSPEC 1969-2003/Jul W3  
(c) 2003 Institution of Electrical Engineers  
File 94: JICST-EPlus 1985-2003/Jul W3  
(c) 2003 Japan Science and Tech Corp(JST)  
File 6: NTIS 1964-2003/Aug W1  
(c) 2003 NTIS, Intl Cpyrghrt All Rights Res  
File 144: Pascal 1973-2003/Jul W3  
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(c) 2003 Inst for Sci Info  
File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 399: CA SEARCH(R) 1967-2003/UD=13905  
(c) 2003 American Chemical Society  
File 323: RAPRA Rubber & Plastics 1972-2003/Aug  
(c) 2003 RAPRA Technology Ltd

Set	Items	Description
S1	1830262	CUT OR CUTS OR CUTTING OR MACHINING OR MILLING OR PIERC??? OR CUTOUT OR INCIS??? OR CARV??? OR SHAP???
S2	1429114	OPENING? ? OR HOLE? ? OR APERTURE? ? OR ORIFICE? ? OR PERF- ORAT??? OR CIRCLE? ? OR CAVIT???
S3	42939	CERAMIC? ?(3W) (MATRIX OR COMPOSITE)
S4	25043	S1(5N)S2
S5	13	S3(10N)S4
S6	13	S5 NOT PY>2002
S7	13	S6 NOT PD=20020209:20030930
S8	10	RD (unique items)

8/3,K/1 (Item 1 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

05512134 E.I. No: EIP00035102210

Title: Precision shaping of small diameter wheels using Micro Electric Discharge Truing (MEDT) and hole-machining of Al//20//3 material

Author: Zhang, Chunhe; Ohmori, Hitoshi; Li, Wei

Corporate Source: Inst of Physical and Chemical Research (RIKEN), Saitama, Jpn

Source: International Journal of Machine Tools and Manufacture v 40 n 5 Apr 2000. p 661-674

Publication Year: 2000

CODEN: IMTME3 ISSN: 0890-6955

Language: English

Abstract: There still exist many problems and difficulties in the precision hole - machining of advanced ceramics, composite materials, ultra hard alloys, reinforced plastics, etc., especially, for very small diameter holes. The process...

8/3,K/2 (Item 2 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02992552 E.I. Monthly No: EI9012138435

Title: Machining of ceramic composite TiB//2/SiC by spark erosion.

Author: Ramulu, M.; See, H. -W.; Wang, D. H.

Corporate Source: Univ of Washington, Seattle, WA, USA

Source: Manufacturing Review v 3 n 2 Jun 1990 p 123-129

Publication Year: 1990

CODEN: MREVEY ISSN: 0896-1611

Language: English

Identifiers: CERAMIC COMPOSITE HOLE DRILLING; ELECTRIC DISCHARGE MACHINING ; CERAMIC PARTICULATE COMPOSITES; SPARK EROSION ELECTRODE WEAR

8/3,K/3 (Item 3 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
(c) 2003 Elsevier Eng. Info. Inc. All rts. reserv.

02516984 E.I. Monthly No: EI8802018309

Title: MANUFACTURING PROCESS USING IMPACT COMPRESSION OF A VISCOPLASTIC PRESSURE MEDIUM (APPLICATION TO PIERCING OF BRITTLE SHEETS).

Author: Kurosaki, Yasushi; Fujishiro, Ikuya; Mizukusa, Takashi; Miyake, Yoshiyuki

Source: Nippon Kikai Gakkai Ronbunshu, C Hen v 53 n 493 Sep 1987 p 2035-2041

Publication Year: 1987

CODEN: NKCHDB ISSN: 0387-5024

Language: Japanese

...Abstract: model to determine optimum working conditions. Under a specific condition the process has succeeded in piercing a circular hole through various brittle materials; for example, inorganic glass, alumina ceramic and glassy graphite composite. The hole formation process in a glass sheet is examined experimentally and theoretically. (Author abstract ...

8/3,K/4 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

6427892 INSPEC Abstract Number: A2000-02-4262A-010, B2000-01-4360B-036

Title: **Short pulsed laser machining: How short is short enough?**

Author(s): ~~Xiangli Chen~~; Xinbing Liu

Author Affiliation: GR Corp. Res. & Dev., Schenectady, NY, USA

Journal: Journal of Laser Applications vol.11, no.6 p.268-72

Publisher: AIP for Laser Inst. America,

Publication Date: Dec. 1999 Country of Publication: USA

CODEN: JLAPEN ISSN: 1042-346X

SICI: 1042-346X(199912)11:6L:268:SPLM;1-A

Material Identity Number: N661-1999-006

U.S. Copyright Clearance Center Code: 1042-346X/99/11(6)/268/5/\$15.00

Language: English

Subfile: A B

Copyright 1999, IEE

...Abstract: of the Nd:YAG laser in the Q-switched and the mode locked pulse formats. **Hole** drilling and **cutting** of superalloy, **ceramic**, and **composite** materials are studied. The machined feature quality is improved as the pulse width becomes shorter...

8/3,K/5 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

(c) 2003 INIST/CNRS. All rts. reserv.

15697960 PASCAL No.: 02-0406271

**Inverse problems of material distributions for prescribed apparent fracture toughness in FGM coatings around a circular hole in infinite elastic media**

AFSAR A M; SEKINE H

Department of Mechanical Engineering, Bangladesh University of Engineering and Technology (BUET), Dhaka 1000, Bangladesh; Department of Aeronautics and Space Engineering, Tohoku University, Aoba-yama 01, Aoba-ku, Sendai 980-8579, Japan

Journal: Composites science and technology, 2002, 62 (7-8) 1063-1077

Language: English

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English Descriptors: **Ceramic** materials; Coating material; **Composite** material; Functionally graded material; Mechanical properties; Fracture toughness; **Hole**; Circular **shape**; Crack; Stress intensity factor; Modeling; Numerical simulation

8/3,K/6 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal

(c) 2003 INIST/CNRS. All rts. reserv.

14469105 PASCAL No.: 00-0129637

**Precision shaping of small diameter wheels using micro electric discharge truing (MEDT) and hole-machining of Al SUB 2 O SUB 3 material**

CHUNHE ZHANG; OHMORI H; WEI LI

Materials Fabrication Laboratory, Institute of Physical and Chemical Research (RIKEN), Wako-shi, Saitama 351-0198, Japan

Journal: International journal of machine tools & manufacture, 2000, 40 (5) 661-674

Language: English

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There still exist many problems and difficulties in the precision **hole - machining** of advanced **ceramics**, **composite** materials, ultra hard alloys, reinforced plastics, etc., especially, for very small diameter

holes. The process...

8/3,K/7 (Item 3 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2003 INIST/CNRS. All rts. reserv.

14315951 PASCAL No.: 99-0523281  
**Short pulsed laser machining: How short is short enough?**  
CHEN Xiangli; LIU Xinbing  
GE Corporate Research and Development, P.O. Box 8, Schenectady, New York  
12301; Panasonic Technologies, Inc., 68 Rogers Street, Cambridge, MA 02142  
Journal: Journal of laser applications, 1999-12, 11 (6) 268-272  
Language: English

Copyright (c) 1999 American Institute of Physics. All rights reserved.

... of the Nd:YAG laser in the Q-switched and the mode locked pulse  
formats. **Hole** drilling and **cutting** of superalloy, **ceramic**, and  
**composite** materials are studied. The machined feature quality is improved  
as the pulse width becomes shorter...

8/3,K/8 (Item 4 from file: 144)  
DIALOG(R)File 144:Pascal  
(c) 2003 INIST/CNRS. All rts. reserv.

11920545 PASCAL No.: 95-0092771  
**On the strength of fiber reinforced ceramic composites containing an  
elliptic hole**  
CUI Y L  
Harvard univ., div. applied sci., Cambridge MA 02138, USA  
Journal: Mechanics of materials, 1995, 19 (2-3) 239-249  
Language: English

English Descriptors: **Ceramic** materials; **Composite** material; Fiber  
reinforced material; Mechanical properties; Tensile strength; **Hole** ;  
Elliptic **shape** ; Modeling

8/3,K/9 (Item 1 from file: 399)  
DIALOG(R)File 399:CA SEARCH(R)  
(c) 2003 American Chemical Society. All rts. reserv.

108117565 CA: 108(14)117565c **PATENT**  
**Method of producing cavity containing ceramic material**  
INVENTOR(AUTHOR): NewKirk, Marc S.; Urquhart, Andrew W.; Leshner, H.  
Daniel

LOCATION: USA

ASSIGNEE: Lanxide Technology Co.

PATENT: European Pat. Appl. ; EP 234704 A2 DATE: 870902

APPLICATION: EP 87300409 (870119) \*US 823542 (860127)

PAGES: 42 pp. CODEN: EPXXDW LANGUAGE: English CLASS: C04B-035/65A

DESIGNATED COUNTRIES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

→ US 4828785  
nope  
molding

8/3,K/10 (Item 1 from file: 323)  
DIALOG(R)File 323:RAPRA Rubber & Plastics  
(c) 2003 RAPRA Technology Ltd. All rts. reserv.

00845684

**TITLE: GO WITH THE FLOW TO MAKE A SUPER SCREW**

AUTHOR(S): Tognini R

CORPORATE SOURCE: icotec AG

SOURCE: Materials World; 10, No.3, March 2002, p.16-7

ISSN: 0967-8638  
JOURNAL ANNOUNCEMENT: 200205 RAPRA UPDATE: 200208  
DOCUMENT TYPE: Journal Article  
LANGUAGE: English  
SUBFILE: (R) RAPRA

DESCRIPTORS: APPLICATION; AUTOMATED; AUTOMOTIVE APPLICATION; BOLT; BONE  
PINNING; BONE REPAIR; CAR; CAVITY ; CERAMIC ; COMPANIES; COMPANY;  
COMPOSITE ; CUTTING ; DAMAGE; DENSITY; DEVELOPMENT; FASTENER; FIBER  
CONTENT; FIBRE; FIBRE CONTENT; FLOW; HEAT INSULATION; HEATED; HEATING;  
IMPLANT...

```

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File 15:ABI/Inform(R) 1971-2003/Aug 01
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File 9:Business & Industry(R) Jul/1994-2003/Jul 31
(c) 2003 Resp. DB Svcs.
File 47:Gale Group Magazine DB(TM) 1959-2003/Jul 24
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File 621:Gale Group New Prod.Annou.(R) 1985-2003/Aug 01
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(c) 2003 McGraw-Hill Co. Inc
File 16:Gale Group PROMT(R) 1990-2003/Aug 01
(c) 2003 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 95:TEME-Technology & Management 1989-2003/Jul W2
(c) 2003 FIZ TECHNIK
File 148:Gale Group Trade & Industry DB 1976-2003/Aug 01
(c)2003 The Gale Group
File 483:Newspaper Abs Daily 1986-2003/Jul 31
(c) 2003 ProQuest Info&Learning
File 484:Periodical Abs Plustext 1986-2003/Jul W4
(c) 2003 ProQuest
File 141:Readers Guide 1983-2003/Jun
(c) 2003 The HW Wilson Co

```

Set	Items	Description
S1	4367550	CUT OR CUTS OR CUTTING OR MACHINING OR MILLING OR PIERC???
		OR CUTOUT OR INCIS??? OR CARV??? OR SHAP???
S2	2183826	OPENING? ? OR HOLE? ? OR APERTURE? ? OR ORIFICE? ? OR PERF-
		ORAT??? OR CIRCLE? ? OR CAVIT???
S3	7763	CERAMIC? ?(3W) (MATRIX OR COMPOSITE)
S4	36064	S1(5N)S2
S5	2	S3(10N)S4
S6	53718	S1(10N)S2
S7	14	S3(S)S6
S8	14	S7 NOT PY>2002
S9	12	S8 NOT PD=20020209:20030930
S10	11	RD (unique items)

10/AA,AN,TI/1 (Item 1 from file: 636)  
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02307542 Supplier Number: 44479772  
Related Patents:

10/AA,AN,TI/2 (Item 2 from file: 636)  
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01913578 Supplier Number: 43342994  
CERAMIC COMPONENTS AND PROCESSING TECHNOLOGIES

10/AA,AN,TI/3 (Item 3 from file: 636)  
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01494702 Supplier Number: 42093892  
NONTRADITIONAL MACHINING [911103]

10/AA,AN,TI/4 (Item 1 from file: 95)  
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20000303859  
Precision shaping of small diameter wheels using micro electric discharge  
truing (MEDT) and hole-machining of Al2O3 material

10/AA,AN,TI/5 (Item 2 from file: 95)  
DIALOG(R) File 95: (c) 2003 FIZ TECHNIK. All rts. reserv.

F98040157963  
Biomechanical characterization of a biodegradable calcium phosphate  
hydraulic cement: A comparison with porous biphasic calcium phosphate  
ceramics

10/AA,AN,TI/6 (Item 3 from file: 95)  
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M95071164640  
Notch sensitivity of fiber-reinforced ceramics  
(Die Kerbempfindlichkeit faserverstaerkter Keramiken)

10/AA,AN,TI/7 (Item 4 from file: 95)  
DIALOG(R) File 95: (c) 2003 FIZ TECHNIK. All rts. reserv.

M93018116616  
Process for forming fiber reinforced composite articles  
(Verfahren zur Herstellung von faserverstaerkten Kompositgegenstaenden)

10/AA,AN,TI/8 (Item 5 from file: 95)  
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M92073324562  
Ultrasonic machining of ceramics  
(Ultraschallbearbeitung von keramischen Werkstoffen)

10/AA,AN,TI/9 (Item 1 from file: 148)  
DIALOG(R) File 148: (c) 2003 The Gale Group. All rts. reserv.

12145231 SUPPLIER NUMBER: 61694144  
Four excellent reasons for attending IMTS! (Brief Article)

10/AA,AN,TI/10 (Item 2 from file: 148)  
DIALOG(R)File 148:(c)2003 The Gale Group. All rts. reserv.

05538240 SUPPLIER NUMBER: 11590555  
Product showcase. (Special Section: 1992 Buyers' Guide) (Directory)

10/AA,AN,TI/11 (Item 3 from file: 148)  
DIALOG(R)File 148:(c)2003 The Gale Group. All rts. reserv.

05195358 SUPPLIER NUMBER: 10887563  
Ceramic Expo product review. (American Ceramic Society Expo)



10/3,K/1 (Item 1 from file: 636)  
DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
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02307542 Supplier Number: 44479772 (USE FORMAT 7 FOR FULLTEXT)

**Related Patents:**

Energy Conservation News, v5, n11, pN/A  
March, 1994

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 942

... Andrew W.; Leshner, H.

Daniel

State/Country: DE

A method of producing a self-supporting **ceramic composite** body having therein at least one cavity which inversely replicates the geometry of a positive...

...the mold of parent metal within a conformable bed of filler to provide therein a **cavity shaped** and filled by the mold. The assembly is heated to melt the parent metal mold....

...the mold of parent metal is eventually evacuated of the metal. There remains behind a **cavity** whose **shape** inversely replicates the original **shape** of the mold. The method provides **ceramic composite** articles having therein at least one **cavity** inversely replicating the **shape** of the mold which supplied the parent metal for oxidation.

Porous Ceramic

Patent Number: 5279737...

10/3,K/2 (Item 2 from file: 636)  
DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
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01913578 Supplier Number: 43342994 (USE FORMAT 7 FOR FULLTEXT)

**CERAMIC COMPONENTS AND PROCESSING TECHNOLOGIES**

High Tech Ceramics News, v4, n6, pN/A  
Oct, 1992

Language: English Record Type: Fulltext

Document Type: Newsletter; Trade

Word Count: 578

... Country: Connecticut

Assignee: United Technologies Corporation

Abstract: A method of manufacturing a glass or glass- **ceramic matrix composite** article is disclosed which serves to eliminate the need for an expensive vacuum hot press...

...temperature below that of the preform. A resultant composite article assumes the configuration of the **shaped** die **cavity** and is cooled by the natural loss of heat to the dies.

COPYRIGHT 1992 by...

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DIALOG(R) File 636:Gale Group Newsletter DB(TM)  
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01494702 Supplier Number: 42093892 (USE FORMAT 7 FOR FULLTEXT)

**NONTRADITIONAL MACHINING [911103]**

Innovator's Digest, v90, n11, pN/A  
May 21, 1991

Language: English Record Type: Fulltext

Document Type: Newslett      Trade  
Word Count:      89

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...developments in nontraditional machining. The papers focus on topics such as: die sinking electrical discharge **machining** ; flexible abrasive tools for finishing of **holes** , bores, and internal surfaces; using a laser to **cut** intersecting tube joints; **ceramic** machining; **composite** machining; and more.

10/3,K/7      (Item 4 from file: 95)  
DIALOG(R)File 95:TEME-Technology & Management  
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00657223 M93018116616

**Process for forming fiber reinforced composite articles**  
(Verfahren zur Herstellung von faserverstaerkten Kompositgegenstaenden)  
Prewo, KM  
Unit. Technologies Corp., Hartford, USA  
1991  
Document type: European patent application    Language: English  
Record type: Abstract

ABSTRACT:

A method of manufacturing a glass matrix or glass- **ceramic matrix composite** article comprising the steps of: (a) providing a preform composed of a mixture of reinforcing fiber material and glass or glass- **ceramic matrix** material; (b) heating the preform to a temperature sufficiently high to soften the glass or...

...ceramic powder to a deformable state; (c) deforming the preform in the means defining a **shaped** die **cavity** having a temperature below that of the preform; and (d) cooling the deformed preform by...

...of heat to the dies resulting in a composite article assuming the configuration of the **shaped** die **cavity** . (No obligations as to scope of patent protection and application.)

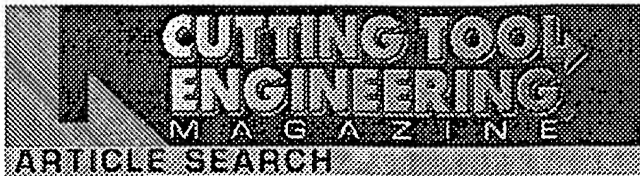
10/3,K/11      (Item 3 from file: 148)  
DIALOG(R)File 148:Gale Group Trade & Industry DB  
(c)2003 The Gale Group. All rts. reserv.

05195358      SUPPLIER NUMBER: 10887563      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Ceramic Expo product review. (American Ceramic Society Expo)**  
Ceramic Industry, v136, n6, p32(6)  
June, 1991  
ISSN: 0009-0220      LANGUAGE: ENGLISH      RECORD TYPE: FULLTEXT  
WORD COUNT:    2843      LINE COUNT:    00246

TEXT:

...selected at the station level as well as from the central command screen. Buehler Ltd. **Circle** 101 High-temperature ceramic fiber vacuum-formed boards and **shapes** have a true 1800[deg.]C working temperature. Available in densities from 400 kg/m...

...cavity; single-mode, direct coupling to sample; and closed loop, repeatable process control. Applications include **ceramic** sintering, **composite** curing, in-line thermal processing and electromagnetic field diagnostics. Wavemat Inc. **Circle** 106 Leco 2001...



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1. [In This Issue](#) (3%)

**Abstract:** Winter 2000 Volume 4 Number 12. In This Issue. Editorial. News. Race Report. DC Sports. Exhaust Syst. Ilmor Racers. Virtual Mfg. Women Engrs. High Speed. Mindrum. Winter00.pdf. Summer '03. Spring '03. Winter '03. Fall '02. Summer '02. Spring '02. Winter '02. Fall '01. Summer '01. Spring '01. In This Issue . ...  
File Name: v4i12g-inthis.htm, Size: 14KB, Last Modified: Monday, July 07, 2003 at 4:24:25 PM

2. [Mindrum](#) (3%)

**Abstract:** Winter 2000 Volume 4 Number 12. In This Issue. Editorial. News. Race Report. DC Sports. Exhaust Syst. Ilmor Racers. Virtual Mfg. Women Engrs. High Speed. Mindrum. Winter00.pdf. Summer '03. Spring '03. Winter '03. Fall '02. Summer '02. Spring '02. Winter '02. Fall '01. Summer '01. Spring '01. All Answer Man. ...  
File Name: v4i12i-mindrum.htm, Size: 35KB, Last Modified: Monday, July 07, 2003 at 4:24:25 PM

3. [New Products](#) (3%)

**Abstract:** vol 3, no. 10 / Summer '99. In This Issue. Editorial:HFOs. Industry News. Race Report. GT Bikes. Custom Cruise. SKS Die&Mach. Inserts. TVR Cars. AAR Eagles. Dan Gurney. Haas Lab. New Products. Solutions. Summer99.pdf. Spring '97. Summer '97. Fall '97. Winter '98. Spring '98. Summer '98. Fall '98. CNCMagHome. ...  
File Name: v3i10m.htm, Size: 16KB, Last Modified: Monday, May 12, 2003 at 11:07:35 PM

4. [R/C Racer](#) (3%)

**Abstract:** volume 3 > number 11 > fall 1999. Cover Story. DeBerti Wheels. In This Issue. Editorial. Industry News. Race Report. Brit American. U.S. Navy. Action Mold. R/C Racer. Opting for Orbs. Inland Training. Trade Shows. CAM Software. RAH Industries. New Products. Solutions. Fall99.pdf. Spring '97. Summer '97. CNCMagHome. ...  
File Name: v3i11j.htm, Size: 13KB, Last Modified: Thursday, April 24, 2003 at 11:32:26 PM

5. **TREK Bikes (2%)**  
**Abstract:** CNC Machining Magazine . In This Issue. Editorial. Industry News. Race Report. Funny Cars. C&R Molds. Viking Tooling. TREK Bikes. Image Counts. NTMA Training. VQC Probing. Fall02.pdf. Summer '03. Spring '03. Winter '03. Fall '02. Summer '02. Spring '02. Winter '02. Fall '01. Summer '01. Spring '01. All Answer Man. ...  
File Name: v6i23h-trek.htm, Size: 48KB, Last Modified: Monday, July 07, 2003 at 4:24:33 PM
6. **Swift Racers (2%)**  
**Abstract:** Sizeable Cuts. Industry News. Race Report. PrecisionBikes. Speedway Eng. Swift Racers. Aircraft Engg. CAD/CAM. Cutting Fluids. New Products. Back Page. Spring98.pdf. Spring '97. Summer '97. Fall '97. Winter '98. Spring '98. Summer '98. Fall '98. Winter '99. Spring '99. Summer '99. Fall '99. CNCMagHome. 1998. Number 5. ...  
File Name: v2i05e-swift.htm, Size: 35KB, Last Modified: Friday, November 01, 2002 at 11:25:29 PM
7. **GT Bikes (2%)**  
**Abstract:** vol 3, no. 10 / Summer '99. In This Issue. Editorial:HFOs. Industry News. Race Report. GT Bikes. Custom Cruise. SKS Die&Mach. Inserts. TVR Cars. AAR Eagles. Dan Gurney. Haas Lab. New Products. Solutions. Summer99.pdf. Spring '97. Summer '97. Fall '97. Winter '98. Spring '98. Summer '98. Fall '98. CNCMagHome. ...  
File Name: v3i10e.htm, Size: 22KB, Last Modified: Monday, May 12, 2003 at 11:07:34 PM
8. **Laser Cutting (2%)**  
**Abstract:** CNC Machining Magazine . In This Issue. Editorial. Industry News. Race Report. Haas Racing. Laser Cutting. Big Ideas. Power Tools. Scan Optics. Iowa.edu. New Products. Answer Man. Summer02.pdf. Summer '03. Spring '03. Winter '03. Fall '02. Summer '02. Spring '02. Winter '02. Fall '01. Volume 6 Issue 22 Summer 2002. ...  
File Name: v6i22f-lasers.htm, Size: 20KB, Last Modified: Monday, July 07, 2003 at 4:24:32 PM
9. **New Products (1%)**  
**Abstract:** volume 3 > number 11 > fall 1999. Cover Story. DeBerti Wheels. In This Issue. Editorial. Industry News. Race Report. Brit American. U.S. Navy. Action Mold. R/C Racer. Opting for Orbs. Inland Training. Trade Shows. CAM Software. RAH Industries. New Products. Solutions. Fall99.pdf. Spring '97. PRODUCT RELEASE. ...  
File Name: v3i11p.htm, Size: 22KB, Last Modified: Thursday, April 24, 2003 at 11:31:34 PM
10. **Race Report (1%)**  
**Abstract:** CNC Machining Magazine . In This Issue. Editorial. Industry News. Race Report. Funny Cars. C&R Molds. Viking Tooling. TREK Bikes. Image Counts. NTMA Training. VQC Probing. Fall02.pdf. Summer '03. Spring '03. Winter '03. Fall '02. Summer '02. Spring '02. Winter '02. Fall '01. Summer '01. Spring '01. All Answer Man. ...  
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same as above

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finds documents containing 'information' but not 'retrieval'

**(information not retrieval) and WAIS**

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